



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,530	09/16/2003	H. Britton Sanderford JR.	241569US20CONT	1703
22850 7590 01/02/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER TSE, YOUNG TOI	
			ART UNIT 2611	PAPER NUMBER
			NOTIFICATION DATE 01/02/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/662,530	Applicant(s) SANDERFORD ET AL.	
	Examiner YOUNG T. TSE	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 11-16, 19-20, 22-24 and 27-30 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 17, 18, 21, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 19-24, filed on 29 November 2007, with respect to 35 U.S.C. 103(a) have been fully considered and are persuasive. The rejection of 9 has been withdrawn.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the synchronization mechanism as recited in claim 8 and the multiplexer mechanism as recited in claim 24 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 1-30 are objected to because of the following informalities:

In claim 1 line 11, "sequences" should be "sequence".

In claim 5, line 2, "quadrature amplitude modulation (QAM)" should be "QAM".

The dependent claims 2-4 and 6-8 depend from claim 1.

In claim 9, lines 11 and 15, "0.1%" and "each receive" should be "1%" as described in paragraphs [0123] and [0170] of the specification and "each receives", respectively.

In claim 10, lines 13 and 24, "sequences" and "an encoded" should be "sequence" and "the encoded", respectively.

In claim 11, line 2, "a first data packet on a" should be "the first data packet on the"; and both lines 4 and 8, "the signal" should be "the modulated signal".

In claim 14, line 6, "each receive" should be "each receives"; line 14, "a first" should be "a second"; and lines 14 and 17, "higher" should be "is higher".

In claim 17, line 7, "receive" should be "receives".

In claim 18, lines 6-7, "a timer and an" should be "the timer and the".

In claim 21, line 3, "at a" should be "at the".

In claim 25, line 2, "receiver" should be "receivers each".

In claim 26, line 4, "a FM" should be "the FM" and line 6, "a modulation" should be "the modulation".

The dependent claims 12-13, 15-6, 19-20, 22-24 and 27-30 depend from claim 9.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-8, 10, 17-18, 21 and 25-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1-7, 10, 17, and 21, "p", "M", "λ", "N", and "B" are all undefined.

In claim 6 (line 2), claim 18 (line 16), and claim 25 (lines 2, 3, 15, and 28), the phrases "the DC component", "the low power state", "the first and second base station", "the signal", "the subdemodulator", and "the original data stream" all lack antecedent basis.

The claimed subject matter recited in claim 8 lacks cooperation or connection the precedent claim 1.

The claimed subject matter of claim 26 is related to the steps of a method.

However, the precedent claims 9 and 25 are apparatus claim and it is unclear which

claimed element(s) recited in the precedent claims 9 and 25 is based to perform the steps of claim 26.

Allowable Subject Matter

6. Claims 1-8, 10, 17-18, 21 and 25-26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

7. Claims 1-30 would be allowable if rewritten or amended to overcome the objections set forth in this Office action.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wagner et al. and Bolin et al. relate to systems each comprising a transmitter section and a receiver section. Wherein the transmitter section comprises a QAM modulator and a FSK modulation and the receiver section comprises a QAM demodulator and a FSK demodulator.

Matsuda et al., Farley et al. and Attar et al. related to communication systems, wherein each system comprises a first wireless base station for transmitting data packets to subscriber stations within a first coverage area and a second wireless base station for transmitting data packets to subscriber stations within a second coverage area that overlaps with the first coverage area.

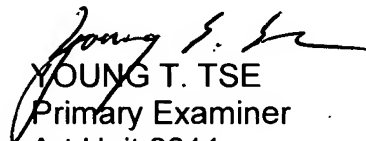
Application/Control Number:
10/662,530
Art Unit: 2611

Page 6

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


YOUNG T. TSE
Primary Examiner
Art Unit 2611